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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/057,406 04/08/98 WERENICZ H 94-36-3-US-D

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EXAMINER

AFTERGUT, J

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 03/16/01

28

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/057,406

Applicant(s)

WERENICZ ET AL.

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 33-36, 38-42, 44 and 46-56 is/are pending in the application.
- 4a) Of the above claim(s) 33, 34, 36, 38-41 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-12, 35, 42, 44, 46, 47 and 49-56 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 25.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Present State of Claims

The applicant is advised that all preliminary amendments have been entered in this application. It should be noted that several of the amendments did not include underlining and bracketing in the claims to identify the changes made to the claims. Additionally, as a result of the three different preliminary amendments, the applicant has introduced article claims into the application (independent claims 33 and 36 have been presented as article claims) while claims 38-41 and 48 which depend from claim 33 recite in the preamble a method. For purposes of examination herein, claims 33, 36, 38-41, and 48 are being taken as drawn to an article as presented by applicant. Additionally, the dependency of claim 34 and 47 is not correct. Claim 34 is stated to depend upon claim 32 (a canceled claim) and it is believed it was applicant's intent to make the claim dependent upon claim 33 (and thus claim 34 will also be considered an article claim). Regarding claim 47, the claim depends upon claim 1 and it would appear that the intent was to make the claim dependent upon claim 10 and as such the claim will be considered hereinafter as dependent upon claim 10 for purposes of examination.

Election/Restrictions

1. Newly submitted claims 33, 34 (note that claim 34 currently depends upon claim 32, which was canceled, for purposes of examination it is believed that applicant intended claim 34 to depend from claim 33), 36, 38-41, and 48 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims are directed to an article which is independent and distinct from the method claims as defined. The method claims at hand requires that one coat the web in a non-contacting manner while the article does

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not. (Note that method limitations in article claims are given no weight unless it can be shown that the method steps claimed would have produced a materially different product from a product which coated a substrate directly).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 33, 34, 36, 38-41, and 48 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

33 34 36 38 39 40 41

3. Claims 2-6, 8-12, 35, 42, 44, 46, 47, 49-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maletsky et al '928 in view of Cardinal (the article entitled "A New Cost Effective Method to Confer Tailored Breathability and Liquid Barrier Properties to Nonwovens").

The reference to Malesky et al '928 suggested that it was known at the time the invention was made to provide a hot melt adhesive in the form of a continuous film which was thin and which was coated upon the surface of a nonwoven web in the manufacture of a disposable breathable ply for a diaper for example. The reference taught that one skilled in the art would

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have incorporated a plastic material and extruded the same in order to provide the coating upon the substrate. The reference additionally taught that the hot melt plastic material would have been applied at thicknesses from 16.5-38.1 microns where flexibility was of import, see column 3, lines 52-65. The reference additionally suggested that the coating was applied by melting the polymer and applying the same as a film which was pinhole free. The coating was allowed to cool to attach the coating to the substrate. The melt was stated to have been coated upon the substrate via an extruder. Additionally, the processing temperatures for the melt lied in the range of 300-500 degrees F (as low as 149 degrees C) and the viscosity of the polymer within this range of operating temperatures was 40-1500 poise. Clearly, the coating composition would appear to have the same operating "window" as defined by appellant. The reference failed to expressly show that the coating extruder was spaced from the substrate during the coating operation.

However, in the art of making a breathable film in a disposable diaper, it was known to provide a thin coating from an extruder by extruding a film and allowing the film to free fall upon the substrate in order to coat the same as suggested by Cardinal. Note that in Cardinal after the film contacted the nonwoven substrate the same was cooled with a chill roller in order to develop a bond between the film and the substrate. Clearly, the techniques of Cardinal would have been included in the processing suggested by Maletsky and one skilled in the art would have performed the coating techniques of Cardinal from an extruder in order to provide a moisture proof barrier guard. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the techniques of Cardinal to extrude a film a coat a substrate in the formation of a film/nonwoven laminate useful as a breathable ply in the same in

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the manufacture of a film/nonwoven laminate as suggested by Maletsky '928 wherein one employed the specified coating material in order to produce thin, pinhole free, continuous films upon the substrates.

Regarding claim 2, note that the references set forth above suggested that one skilled in the art would have coated a nonwoven web. Regarding claims 3 and 4, note that Cardinal suggested that the film extruder would have been spaced from the nonwoven web. One skilled in the art would have understood that this spacing would have been dependent upon the properties of the film and that the film would have to retain enough heat after exiting the die in order to develop a bond. As a result, the particular spacing between the die and the substrate would have been viewed as a result effective variable. Regarding claims 5 and 6, the reference to Cardinal clearly depicted a slot nozzle for the coating operation and the structures of the same were taken as conventional in the art. Regarding claim 8, note that the thickness of the coatings was such that the coating weight would have been less than 30 g/square meter. More specifically, the applicant has suggested in their specification that there is a relationship between coating weight and thickness of the coating and when one had achieved a coating as thin as 16.5 microns as suggested by Maletsky one would have expected that the coat weight would have been within the specified range. Regarding claim 9, one would have expected to operate the equipment at the necessary speed for commercial acceptable lamination of webs in diaper formation and such would have clearly included speeds in excess of 200 meters per minute. Additionally regarding claims 11-12, the artisan would have understood that coating compositions which required less of a temperature for processing would have been available. Note that in Maletsky the reference tested VESTOPLAST as a suitable resin and that this material was one of the resins selected for

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processing by applicant. The same resins would have been expected to process in a similar fashion and thus it would have been within the purview of the ordinary artisan to operate the extruding device at a lower temperature than 149 degrees C. Regarding claim 35, note that the reference suggested the use of VESTOPLAST which was the same material employed by applicant. One would have expected that the material was shear thinning. Regarding claim 42, the compositions of Maletsky are hot melt adhesives. Regarding claim 44, the reference to Maletsky suggested that the film thickness would have included films up to 5 mils in thickness (or 127 microns). As discussed above the reference to Maletsky suggested that the compositions employed would have been hot melt adhesives and that the same would have included viscosities which fell within the specified claim ranges. Regarding claim 46, while the reference to Maletsky did not expressly suggest that the coat weight was less than 20 grams/square meter, the reference clearly suggested that one would have employed very thin films which were pinhole free. As discussed in applicant's own specification on page 8, a film thickness of 75 microns equated to a coating weight of 70 grams/square meter. At a thickness of 16.5 microns as suggested by Maletsky, one would have expected the coat weight to be approximately 15.4 grams/square meter. Clearly, one would have expected that the thin coatings of Maletsky would have included coat weights within the specified range. Regarding claim 47, note that the composition was polypropylene. Regarding claim 48, the reference to Maletsky suggested that those skilled in the art would have added conventional additives to the resin blend and such would have included plasticizer and tackifier as such were conventionally employed in hot melt adhesives. Regarding claim 49, the reference to Maletsky suggested that one skilled in the art would have utilized the resins of the type recited. Regarding claims 50 and 51, while the

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reference to Maletsky suggested that one skilled in the art would have preferred to employ the specified composition, the reference to Cardinal suggested that block copolymers would also have been suitable for the operation. The reference to Maletsky additionally suggested that EVA was known to have been employed to forming the specified thin films, see column 1, lines 10-22. The particular selection of adhesive employed would have been within the purview of the ordinary artisan. Regarding claim 52, the references to Cardinal suggested that the films would have been breathable. Regarding claim 53 and 54, because the references suggested that one skilled in the art would have utilized polymers which were of the same composition as that recited by applicant (VESTOPLAST) the resins must have the same claimed properties. Regarding claim 55, note that the references as set forth above suggested that the substrate would have included a nonwoven and additionally that the coat weight was suggested by the art of record. Regarding claim 56, the references again suggested that one would have utilized the operation to coat nonwoven webs.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 3 further taken with E.P. 295,684 for the same reasons as previously presented in paragraph 3 of paper no. 21.

5. Claims 47-51, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 3 further taken with the applicant's admitted prior art (and/or the state of the prior art at the time the invention was made) for the same reasons as expressed in paper no. 21, paragraph 4.

Response to Arguments

6. Applicant's arguments with respect to claims 2-12, 35, 42, 44, 46, 47, 49-56 have been considered but are moot in view of the new ground(s) of rejection.

The applicant argues that the references failed to teach the claimed viscosity at the claimed operating temperatures. Such was clearly suggested by Maletsky as discussed above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maletsky et al (U.S. Patent 4,998,928) relates to Maletsky et al as cited above. Werenicz et al relates to this application as a continuation in part.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-7718 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jeff M. Aftergut
Primary Examiner
Art Unit 1733

JHA
March 15, 2001

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